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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,278	01/30/2002	Toshio Yamagiwa	0505-0935P	2642
2292	7590	09/15/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			SWARTHOUT, BRENT	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/058,278

Applicant(s)

YAMAGIWA ET AL.

Examiner

Brent A Swarthout

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-7 and 9-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 9-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 04/02/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

a. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nowicki et al. in view of Rea et al. and Whiteing et al.

Nowicki discloses a tire pressure monitoring system comprising pressure detecting means 16 at the tire, main transmitting means (col.3, line 57), main receiving means, switch turn-on detecting means (col.3, lines 39-51), control means 32 for receiving on signal and pressure signal, and means for providing a vehicle operator with a tire pressure signal immediately when a vehicle is turned on (col. 6, lines 7-15), the control means at the wheel permitting transmission of sensed signals to an operator, except for use of auxiliary transmit and receive devices and detector having an air valve.

However, since Nowicki teaches desirability of providing a pressure obtained during sleep mode to an operator instantly on start up, choosing to use auxiliary transmit/receive devices to provide this data would have been an obvious matter of engineering choice, merely depending on whether the expense of additional equipment was deemed necessary to accomplish the same function as performed by Nowicki .

Rea discloses use of vehicle tire pressure detector body 10 including air valve member 48 (Fig. 4c).

Whiteing teaches desirability of transmitting and subsequently reading transmitted tire information at a frequency based on vehicle speed (col.1, lines 51-65).

It would have been obvious to utilize tire pressure detector structure as suggested by Rea and transmission/reception of signals based on vehicle speed as taught by Whiteing, in conjunction with control means as disclosed by Nowicki, in order to allow easier installation of a detector and permit cost savings by only providing operation at desired times, and to permit more frequent monitoring of signals at high speeds where low pressure would have been more hazardous.

2. Claims 3,4,and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nowicki et al in view of Rea et al., Whiteing et al. and Bankart et al.

Bankart discloses the well known use of a tire pressure sensor comprising detector body with valve 1, seal member 32 and threaded nut 30.

It would have been obvious to use seal member as taught by Bankart in conjunction with a pressure monitoring system as disclosed by Nowicki, Whiteing and Rea, in order to minimize air leakage.

Regarding claim 14, the valve member 1 of Bankart is a communication hole.

3. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nowicki et al. in view of Rea et al., Whiteing et al. and McClelland.

McClelland discloses use of a tire pressure warning means (col. 2, lines 56-59), and use of different pressures for different speeds (col.3, lines 22-48).

It would have been obvious to use a pressure alert and different pressure thresholds for different speeds as taught by McClelland in conjunction with a system as disclosed by Nowicki, Whiteing and Rea, in order to avoid false alerts for normal speed ranges and to ensure that an operator was aware of dangerous pressures.

4. Claims 7, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClelland in view of Rea et al. and Ernst.

McClelland discloses a tire pressure alerting system comprising transmitter 170, pressure sensor 120, receiver (col.2, line 53), switch off detection means (col.2, lines 24-31) and control means 100 for receiving off signal and pressure signal, and timer means, wherein a receiver is active for a set time at predetermined time intervals when an off signal is evident (col.2, lines 24-31), except for tire valve mounted to detector body or signal receiving time greater than transmitting time.

Choosing to have a control means and timer at the vehicle body would have been obvious, since they provide the same function of providing a battery

saving mode for monitoring pressure, when a vehicle is in an "off" mode, below a specific speed.

Rea discloses vehicle tire pressure detector 10 with air valve 48 mounted thereat (Fig. 4c).

Ernst teaches desirability of receiving a tire signal over a period longer than it is transmitted (col.8, lines 39-50).

It would have been obvious to utilize tire pressure detector structure as suggested by Rea and longer receiving time than transmitting time as taught by Ernst in conjunction with a tire pressure system as disclosed by McClelland, in order to allow easier installation of a detector and permit cost savings by only providing operation at desired times, and to permit receipt of a whole transmitted signal without a portion being cut off.

5. Claims 9,10 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClelland in view of Rea et al., Ernst and Bankart et al.

Claims are rejected for the same reasons as set forth previously in paragraph No. 2.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the


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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent A Swarthout whose telephone number is 571-272-2979. The examiner can normally be reached on M-F from 6:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass, can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

  
Brent A Swarthout  
Examiner  
Art Unit 2636

**BRENT A. SWARTHOUT  
PRIMARY EXAMINER**